AD_____

Award Number: DAMD17-00-1-0193

TITLE: Outcomes of Screening Mammography in Elderly Women

PRINCIPAL INVESTIGATOR: Philip W. Chu
Rebecca Smith-Bindman, M.D.

CONTRACTING ORGANIZATION: University of California, San Francisco
San Francisco, California 94143-0962

REPORT DATE: April 2002

TYPE OF REPORT: Annual Summary

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;
Distribution Unlimited

The views, opinions and/or findings contained in this report are
those of the author(s) and should not be construed as an official
Department of the Army position, policy or decision unless so
designated by other documentation.

20020913 012

1

REPORT DOCUMENTATION PAGE

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE April 2002	3. REPORT TYPE AND DATES COVERED Annual Summary (13 Mar 01 - 12 Mar 02)

4. TITLE AND SUBTITLE
Outcomes of Screening Mammography in Elderly Women

5. FUNDING NUMBERS
DAMD17-00-1-0193

6. AUTHOR(S)
Philip W. Chu
Rebecca Smith-Bindman, M.D.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

University of California, San Francisco
San Francisco, California 94143-0962

E-Mail: bill.chu@radiology.ucsf.edu

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)

U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

10. SPONSORING / MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION / AVAILABILITY STATEMENT

Approved for Public Release; Distribution Unlimited

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 Words)*

There is uncertainty about whether women older than age 65 should undergo screening mammography. Although screening mammography may benefit some elderly women through the detection of early breast cancers, it may harm other women through false positive diagnoses and the detection of clinically insignificant lesions. This research study involves the design and implementation of a data analysis of HCFA Medicare billing claims linked with National tumor registry data from the Surveillance Epidemiology and End Results (SEER) program. The specific aims of this research will evaluate 1) differences in breast cancer mortality, 2) differences in breast cancer treatment and 3) difference in breast cancer tumor attributes between women who were screened and those who were not. In the second year of this grant the PI will focus on validating that the Medicare claims are accurate for determining screening mammography.

14. SUBJECT TERMS
breast cancer, screening mammography, elderly women, false positive diagnoses, Medicare

15. NUMBER OF PAGES
5

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT Unlimited

Table of Contents

INTRODUCTION

There is uncertainty about whether women older than age 65 should undergo screening mammography. Although screening mammography may benefit some elderly women through the detection of early breast cancers, it may potentially harm other women through false positive diagnoses and the detection and surgical treatment of clinically insignificant lesions. This research study involves the design and implementation of a data analysis of HCFA Medicare billing claims linked with National tumor registry data from the Surveillance Epidemiology and End Results (SEER) program. The specific aims of this research will evaluate 1) differences in breast cancer mortality, 2) differences in breast cancer treatment (mastectomy and lumpectomy) and 3) difference in breast cancer tumor attributes (such as size and stage) between women who were screened and those who were not. Since women with co-morbidities have higher mortality rates than women without co-morbidities, this project will also evaluate whether there are differences in these outcomes by whether women have co-morbidities. An important associated project is to validate that the Medicare billing claims are accurate for the determination of screening mammography, and this analysis must be completed before the primary aims described above can be analyzed. Using prospectively collected data from the San Francisco-Oakland, New Mexico, and Washington State Breast Cancer Surveillance Consortium (BCSC) registries (an NCI sponsored collaboration of mammography registries) linked with data from Medicare for the same geographical regions from 1992–1996, we will assess whether Medicare physician claims can be used to accurately distinguish screening from diagnostic mammography. If the Medicare data base can be used to determine the use of screening mammography, the linked SEER-Medicare data base will be obtained to evaluate the described outcomes of screening mammography among elderly women.

BODY

The original Statement of Work for the project was to focus on "Validating Algorithm for Determining Screening History." Our research efforts have focused on this aim, and the following goals have been achieved:

1) The linked Medicare HCFA/SEER database describing Medicare claims through 1998 and breast cancer cases through 1996 was obtained, and data cleaning of this complex administrative database is underway.

2) Developing an algorithim that will be used for determining the predictor variable of screening mammography utilization.

3) Data has been obtained from 3 Breast Cancer Surveillance Consortium (BCSC) Registries (New Mexico, Colorado, and San Francisco) describing the prospective interpretation of mammography examinations in 5,000 plus women >age 65 with breast cancer.

4) Begun linking the HFCA/SEER data with the BCSC datasets.

All of the original aims were to be analyzed by race and socio-economic factors. In addition to the previous efforts, we have begun to evaluate differences in the use of screening by race and socio-economic factors.

KEY RESEARCH ACCOMPLISHEMENTS

- Data has been obtained, from HFCA Medicare, and three Breast Cancer Consortium Registries.

- Data linking is underway between the HFCA and BCSC data sets.

- Data cleaning MEDICARE/SEER data set.

REPORTABLE OUTCOMES

None

CONCLUSIONS

Due to a transfer of name to this grant, Philip Chu just received the monies in January, 2002. Many of the goals for Year 1 of the project are being completed. The project is moving along quickly and the analyses of the remainder of the aims are expected to proceed as originally planned.